Client's ref.: 9115000094
File: 0711-8856us-final/Calvin/Steve

What is claimed is:

1. A method of braking control in rapid track seeking for an optical drive, comprising the steps of:

detecting a deviation between a pickup head of the optical drive and a center of an information track on an optical disc in the optical drive;

obtaining a tracking error signal according to the deviation;

calculating a seeking velocity according to the tracking error signal;

determining a braking force for the pickup head according to the seeking velocity; and

braking the pickup head with the braking force.

2. The method of braking control in rapid track seeking for an optical drive as claimed in claim 1, further comprising:

providing a predetermined distance so that the step of obtaining the tracking error signal is not performed until the deviation is no greater than the predetermined distance.

3. The method of braking control in rapid track seeking for an optical drive as claimed in claim 1, wherein the tracking error signal is a sine wave signal.

4. The method of braking control in rapid track seeking for an optical drive as claimed in claim 1, wherein the optical drive further comprises a coarse actuator for providing the braking force.

5. The method of braking control in rapid track seeking for an optical drive as claimed in claim 1, wherein the optical drive further comprises an optical sensor for detecting the deviation and obtaining the tracking error signal.

6. A method of braking control in rapid track seeking for an optical drive, comprising the steps of:

calculating a seeking velocity of a pickup head of the optical drive according to a tracking error signal of the pickup head; and

selecting a braking force from a plurality of predetermined braking forces according to the seeking velocity, and braking the pickup head with the braking force.

7. The method of braking control in rapid track seeking for an optical drive as claimed in claim 6, wherein the tracking error signal is a sine wave signal.

8. The method of braking control in rapid track seeking for an optical drive as claimed in claim 6, wherein the optical drive further comprises a coarse actuator for providing the braking force.

9. The method of braking control in rapid track seeking for an optical drive as claimed in claim 6, wherein the optical drive further comprises an optical sensor for detecting a deviation between the pickup head and a center of an information track on an optical disc

in the optical drive and obtaining the tracking error signal.

10. A method of braking control in rapid track seeking for an optical drive, comprising the steps of:

calculating a seeking velocity of a pickup head of the optical drive and a related braking force according to a tracking error signal of the pickup head; and

applying the braking force according to the seeking velocity to the pickup head.

11. The method of braking control in rapid track seeking for an optical drive as claimed in claim 10, wherein the tracking error signal is a sine wave signal.

12. The method of braking control in rapid track seeking for an optical drive as claimed in claim 10, wherein the optical drive further comprises a coarse actuator for providing the braking force.

13. The method of braking control in rapid track seeking for an optical drive as claimed in claim 10, wherein the optical drive further comprises an optical sensor for detecting a deviation between the pickup head and a center of an information track on an optical disc in the optical drive and obtaining the tracking error signal.